



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,344	09/01/2004	Tamer Shanableh	CM00880P	1089
20280	7590	06/09/2008		
MOTOROLA INC 600 NORTH US HIGHWAY 45 W4 - 39Q LIBERTYVILLE, IL 60048-5343			EXAMINER ROBERTS, JESSICA M	
			ART UNIT 2621	PAPER NUMBER
			NOTIFICATION DATE 06/09/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DOCKETING.LIBERTYVILLE@MOTOROLA.COM
ADB035@Motorola.com

Office Action Summary	Application No. 10/506,344	Applicant(s) SHANABLEH, TAMER	
	Examiner JESSICA ROBERTS	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☒ Claim(s) 2,6/2,7/2,8/2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgment of Amendments

The amendment filed on 03/13/2008 overcomes the following rejection(s)/objection(s):

The rejection of claims 1, 5-7 and -10 under 35 U.S.C 112 second paragraph has been withdrawn in view of Applicants amendment.

The objection of claims 9-10 under 37 CFR 1.75(c) has been withdrawn in view of applicants amendment.

Response to Arguments

Applicants argument with respect to claims 1-15 have been fully considered, but are not persuasive.

As to applicant argument regarding "reconstruction of an enhancement layer video object plane in the scalable video transmission.." which are not taught or suggested in the combination of Zhang and Suzuki.

The examiner respectfully disagrees. Zhang discloses a video coding scheme employs a scalable layered coding, such as progressive fine-granularity scalable (PFGS) layered coding, to encode video data into multiple layers [0028]. The operating system implements a client-side video decoder 438 to decode the base and enhancement bitstream into the original video. The client side video decoder 438 has a base layer decoding component 440 and an enhancement layer decoding component 442, and optionally a bit plane coding component 444, [0057]. Further, Zhang discloses at block 1202, the client-side decoder 442 receives the enhancement layer bitstream

from the network and beings searching for a location of VOP start code in the enhancement layer bitstream. Once the VOP start code 812 is located, the decoder starts to decode the current VOP header (block 1204) to glean important information, such as time stamps, VOP type, motion vector length, and so on [0106], and fig. 4 element 442 and fig. 12. Since Zhang discloses to decode the base and enhancement layer into the original bitstream, it is clear to the examiner that decoding back to the original bitstream is analogous to reconstruction of an enhancement stream.

As to applicants argument regarding "identifying .. correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission" which are not taught or suggested in the combination of Zhang and Suzuki.

The examiner respectfully disagrees.

As disclosed by the applicant, the VOP headers belonging to the enhancement layer contain an additional 2-bit field, termed a 'ref_select_code'. This 2-bit field indicates the reference VOPs that the decoder should use to reconstruct the current VOP [0027].

Suzuki teaches a flag specifying which layer picture other than the same layer has been used for generating the prediction reference picture is set, encoded and transmitted for each scalable layer, column 21 line 8-21. If the input bitstream is a P- or B-picture, the motion compensation circuit 107 generates a prediction reference picture from the picture signal from a frame memory 106 and the picture signal from a frame memory 119 in accordance with the flags specifying the motion vector supplied from the

variable-length decoding circuit 102, prediction mode and the flag (ref_layer_id) and (ref_select_code) specifying the layer for reference to output prediction reference picture signals to the arithmetic unit 105, column 25 line 57-66. Further taught is an identifier (ref_select_code) is a flag specifying, based on an identifier (ref_layer_id), which layer picture is to be used as a reference picture in the forward prediction and backward prediction, column 33 line 22-26 and table 10-11. Therefore, it is clear to the examiner that the combination of Zhang and Suzuki teaches identifying... correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission.

As to applicants argument regarding Zhang does not describe a reconstruction of an enhancement layer video object plane in the scalable video transmission.

The examiner respectfully disagrees. The examiner respectfully disagrees. Zhang discloses a video coding scheme employs a scalable layered coding, such as progressive fine-granularity scalable (PFGS) layered coding, to encode video data into multiple layers [0028]. The operating system implements a client-side video decoder 438 to decode the base and enhancement bitstream into the original video. The client side video decoder 438 has a base layer decoding component 440 and an enhancement layer decoding component 442, and optionally a bit plane coding component 444, [0057]. Further, Zhang discloses at block 1202, the client-side decoder 442 receives the enhancement layer bitstream from the network and beings searching for a location of VOP start code in the enhancement layer bitstream. Once the VOP start code 812 is located, the decoder starts to decode the current VOP header (block

1204) to glean important information, such as time stamps, VOP type, motion vector length, and so on [0106], and fig. 4 element 442 and fig. 12. Since Zhang discloses to decode the base and enhancement layer into the original bitstream, it is clear to the examiner that decoding back to the original bitstream is analogous to reconstruction of an enhancement stream.

As to applicants argument regarding Suzuki fails to describe a reconstruction of an enhancement layer video object plane in the scalable video transmission.

The examiner respectfully disagrees. Suzuki discloses In a further aspect, the present invention provides a picture decoding device for receiving and decoding encoded data composed of encoded picture signals of a lower hierarchy and encoded picture signals of an upper hierarchy, the encoded picture signals of the lower hierarchy and the encoded picture signals of the upper hierarchy being signals encoded using respective reference picture signals. The picture decoding device includes a receiving unit for receiving the encoded data, a first decoding unit for decoding the encoded picture signals of the lower hierarchy using reference picture signals for outputting decoded picture signals of the lower hierarchy, with the decoded picture signals of the lower hierarchy being used as first reference picture signals, and a second decoding unit for decoding the encoded picture signals of the upper hierarchy using reference picture signals for outputting decoded picture signals of the upper hierarchy, with the decoded picture signals of the upper hierarchy being used as second reference picture signals, column 9 line 62 to column 10 line 13, and fig. 14). Further, it is noted, that the lower layer corresponds to a base layer; while upper layer corresponds to the

enhancement layer. Since Suzuki discloses to decode the lower and upper layer to form the output signal (fig. 14), it is clear to the examiner that decoding the enhancement layer to form the enhancement layer, is analogous to reconstructing the enhancement layer.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., US-2002/0021761 A1 and in view of Suzuki et al., US-6, 535,558.

4. Regarding **claim 1**, Zhang teaches A method (800) for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network, the enhancement layer transmission including at least one re-synchronization marker followed by a Video Packet Header and header extensions, the method comprising the steps of: replicating a reference VOPs' identifier from a video object

plane header into a number of enhancement layer header extensions (715) ([0029], [0055]); recovering (830, 840, 850, 860) from an error corrupting said reference VOPs' identifier by decoding a correct reference VOPs' identifier from subsequent .enhancement layer header extensions ([0031], [0072]) Zhang discloses a video coding scheme adds error resilience to the enhancement layer to improve its robustness. In addition to the existing start codes associated with headers of each video-of-plane (VOP) and each bit plane, more unique resynchronization marks are inserted into the enhancement layer bitstream which partition the enhancement layer bitstream into more small video packets. With the addition of many resynchronization marks within each frame of video data, the decoder can recover very quickly and with minimal data loss in the event of a packet loss or channel error in the received enhancement layer bitstream ([0029]. Zhang is silent in regards to identifying (870, 880) correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission; wherein the scalable video object plane enhancement layer transmission is an MPEG-4 scalable video object plane enhancement layer transmission, or similar, and the reference VOP's identifier is a 'ref select code' field.

5. However, Suzuki teaches identifying (870, 880) correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission.

Suzuki discloses using a flag specifying which layer picture other than the same layer has been used for generating the prediction reference picture is set, encoded and

transmitted for each scalable layer. This flag is the identifier (ref_layer_id) of the syntax. Further, Suzuki discloses a flag specifying from which layer the forward prediction or backward prediction is to be made is set, encoded and transmitted on the basis of the flag (ref_layer_id), and the this flag is the identifier (ref_select_code) (column 21 line 8-21. The combination of Zhang of Suzuki as a whole teaches the limitations as claimed, further it is clear to the examiner that if correction has been performed, clearly identifying the correct identifier would have been done before correction can take place with the selec_ref_code); wherein the scalable video object plane enhancement layer transmission is an MPEG-4 scalable video object plane enhancement layer transmission, or similar, and the reference VOP's identifier is a 'ref select code' field (column 21 line 17-20 and fig. 10-11).

6. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Zhang with the teachings of Suzuki for providing a picture signal encoding method and apparatus, a picture signal decoding method and apparatus and a recording medium whereby it is possible to improve the prediction and encoding efficiency in the spatial scalable encoding system (column 8 line 65 to column 9 line 3).

7. Regarding **claim 3**, Zhang teaches The method for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network according to Claim 1, wherein the step of recovering includes the steps of: buffering (860) video object plane enhancement layer transmission bits, until a video object plane enhancement layer header extensions is decoded, when an error has

occurred in the reference VOPs' identifier (Zhang discloses the enhancement layer encoder add a VOP header to each VOP segment. The VOP header includes a start code for each VOP, which also functions as a synchronization marker, and frame information. As noted above, this frame information may be copied into the BP header and VP header ([0103]). Zhang continues to teach the encoded base and enhancement layer bitstreams can be stored in the compressed format in the video storage and/or transmitted from server over the network to the client ([0104] and fig. 11). Zhang discloses including start codes and resynchronization markers in the VOP, and the resynchronization markers are used by the decoder when there is an error present to seek forward in the bitstream for the next known resynchronization marker and when found, the decoder is able to begin decoding the next video packet ([0030] which reads upon the claimed limitation). Zhang is silent in regards to correcting (870) said reference VOP's identifier in response to a reference VOPs' identifier extracted from said decoded header extensions.

8. However, Suzuki discloses the use of a flag specifying from which layer the forward prediction or backward prediction is to be made is set, encoded and transmitted on the base of the flag (ref_layer_id), and the this flag is the identifier (ref_select_code) (column 21 line 11-22). Since Suzuki discloses using flags to specify forward and backward prediction with the use of the ref_layer_id and ref_select_code and Zhang discloses the decoder is enabled to detect and recover when the enhancement bitstream is corrupted by channel error [0072], it is clear to the examiner that in order to

detect and recover from channel error, the decoder would extract and correct the enhancement layer based on the identifier.

9. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Zhang with the teachings of Suzuki for providing a picture signal encoding method and apparatus, a picture signal decoding method and apparatus and a recording medium whereby it is possible to improve the prediction and encoding efficiency in the spatial scalable encoding system (column 8 line 65 to column 9 line 3).

10. Regarding **claim 4**, Zhang is silent in regards to The method for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network according to Claim 1, further comprising the step of: selecting (870, 880) a correct reference VOP's identifier to decode subsequent enhancement layer transmissions.

11. Zhang discloses a video coding scheme adds error resilience to the enhancement layer to improve its robustness. In addition to the existing start codes associated with headers of each video-of-plane (VOP) and each bit plane, more unique resynchronization marks are inserted into the enhancement layer bitstream which partition the enhancement layer bitstream into more small video packets. With the addition of many resynchronization marks within each frame of video data, the decoder can recover very quickly and with minimal data loss in the event of a packet loss or channel error in the received enhancement layer bitstream ([0029]).

However, Suzuki discloses using a flag specifying which layer picture other than the

same layer has been used for generating the prediction reference picture is set, encoded and transmitted for each scalable layer. This flag is the identifier (ref_layer_id) of the syntax . Further , Suzuki discloses a flag specifying from which layer the forward prediction or backward prediction is to be made is set, encoded and transmitted on the basis of the flag (ref_layer_id), and the this flag is the identifier (ref_select_code) (column 21 line 8-21).

12. The combination of Zhang of Suzuki as a whole teaches the limitations as claimed, further it is clear to the examiner that if correction has been performed, clearly selecting the correct identifier would have been done before correction can take place with the selec_ref_code.

13. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Zhang with the teachings of Suzuki for providing a picture signal encoding method and apparatus, a picture signal decoding method and apparatus and a recording medium whereby it is possible to improve the prediction and encoding efficiency in the spatial scalable encoding system (column 8 line 65 to column 9 line 3).

14. Regarding **claim 5**, Zhang teaches video encoder (615) comprising: a processor for encoding a scalable video sequence having a plurality of enhancement layers ([0052] and fig. 4), wherein the enhancement layer transmission includes at least one re-synchronization marker followed by Video Packet Header and header extensions ([0087] and fig. 8); replicating means for replicating a reference VOP's identifier from a video object plane header into a number of enhancement layer header extensions (715)

([0091]); and a transmitter for transmitting said scalable video sequence containing said one or more reference VOPs' identifier (fig. 4); and a video decoder (625) (fig. 4) comprising: a receiver for receiving said scalable video sequence containing said video object plane enhancement layer header extensions (715) from said video encoder (fig. 4); a detector detecting one or more errors in said reference VOP's identifier in an enhancement layer of said received scalable video sequence (Zhang discloses the enhancement layer is encoded with syntactic and semantic error detection and protection. Further disclosed is that this technique enable the video decoder to detect and recover when the enhancement bitstream is corrupted by channel errors [0072], therefore, it is clear to the examiner that if the decoder is capable of detecting and recovering from channel errors, the decoder would clearly include a detector for doing such); and a processor operably coupled to said detector for recovering (830, 840, 850, 860) from an error corrupting said reference VOPs' identifier by decoding a correct reference VOP's identifier from subsequent enhancement layer header extensions when said one or more errors is detected (Zhang discloses the client includes a processor, a memory and one or more media output devices. Zhang also discloses the operating system implements a client-side video decoder to decode the base and enhancement bitstream. The client-side decoder has a base layer decoding component and an enhancement layer decoding component [0057] and fig. 4. Further, Zhang discloses the decoder is enabled to detect and recover when the enhancement bitstream is corrupted by channel error [0072]. Therefore it is clear to the examiner that processor and operating system coupled to the decoder are used with detector for detecting and

recovering from channel errors, which reads upon the claimed limitation). Zhang is silent regarding identifying (870, 880) correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission; wherein the scalable video object plane enhancement layer transmission is an MPEG-4 scalable video object plane enhancement layer transmission, or similar, and the reference VOPs' identifier is a 'ref_select_code_' field (715).

15. However, Suzuki discloses using a flag specifying which layer picture other than the same layer has been used for generating the prediction reference picture is set, encoded and transmitted for each scalable layer. This flag is the identifier (ref_layer_id) of the syntax . Further , Suzuki discloses a flag specifying from which layer the forward prediction or backward prediction is to be made is set, encoded and transmitted on the basis of the flag (ref_layer_id), and the this flag is the identifier (ref_select_code) (column 21 line 8-21. The combination of Zhang of Suzuki as a whole teaches the limitations as claimed, further it is clear to the examiner that if correction has been performed, clearly identifying the correct identifier would have been done before correction can take place with the selec_ref_code); wherein the scalable video object plane enhancement layer transmission is an MPEG-4 scalable video object plane enhancement layer transmission, or similar, and the reference VOP's identifier is a 'ref select code' field (column 21 line 17-20 and fig. 10-11).

16. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Zhang with the teachings of Suzuki for providing a picture signal encoding method and apparatus, a picture signal decoding method and

apparatus and a recording medium whereby it is possible to improve the prediction and encoding efficiency in the spatial scalable encoding system (column 8 line 65 to column 9 line 3).

17. Regarding **claim 6**, Zhang teaches A video communication unit (615, 625) adapted for use in the method of any of claims 1 to 4 or adapted for use in the communication system of claim 5 ([0052] and fig. 4).

18. Regarding **claim 7**, Zhang teaches A video encoder (615) adapted for use in the method of any of claims 1 to 4 or adapted for use in the communication system of claim 5 ([0052] and fig. 4).

19. Regarding **claim 8**, Zhang teaches A video decoder (625) adapted for use in the method of any of claims 1 to 4 or adapted for use in the communication system of claim 5 ([0052] and fig. 4).

20. Regarding **claim 11**, the combination of Zhang and Suzuki as a whole teaches everything as claimed above, see claim 5. In addition, Zhang teaches a video communication unit adapted for use in the communication system of claim 5, [0052] and fig. 4).

21. Regarding **claim 12**, the combination of Zhang and Suzuki as a whole teaches everything as claimed above, see claim 5. In addition, Zhang teaches a video encoder adapted for use in the communication system of claim 5 ([0052] and fig. element 438).

22. Regarding **claim 13**, the combination of Zhang and Suzuki as a whole teaches everything as claimed above, see claim 5. In addition, Zhang teaches a video decoder adapted for use in the communication system of claim 5 ([0052] and fig. 4 element 438).

23. Claims 9-10 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., US-2002/0021761 A1 and in view of Suzuki et al., US-6, 535,558.

24. Regarding **claim 9**, the combination of Zhang and Suzuki as a whole teaches everything as claimed above, see claim 6. Zhang does not explicitly teach a mobile radio device comprising a video communication unit in accordance with claim 6. However, Zhang discloses the network is representative of many different types of networks, including the Internet, a LAN (local area network), a WAN (wide area network), a SAN (storage area network), and wireless networks (e.g., satellite, cellular, RF, etc [0051]. Further taught, the network is representative of many different types of networks, including the Internet, a LAN (local area network), a WAN (wide area network), a SAN (storage area network), and wireless networks (e.g., satellite, cellular, RF, etc. [0058].

25. It would have been obvious to one of ordinary skill in the art at the invention to use an encoding device supported by a wireless network, As evidence by Kim et al., US-6,970,506 where compatible encoding devices for wireless networks are disclosed (column 6 line 13-32).

26. Regarding **claim 10**, the combination of Zhang and Suzuki as a whole teaches everything as claimed above see claim 9. Zhang does not explicitly teach a mobile radio device according to claim 9, wherein the mobile radio device is a mobile phone, a portable or mobile PMR radio, a personal digital assistant, a lap-top computer or a wirelessly networked PC. However, Zhang discloses the network is representative of

many different types of networks, including the Internet, a LAN (local area network), a WAN (wide area network), a SAN (storage area network), and wireless networks (e.g., satellite, cellular, RF, etc [0051]. Further taught, The network is representative of many different types of networks, including the Internet, a LAN (local area network), a WAN (wide area network), a SAN (storage area network), and wireless networks (e.g., satellite, cellular, RF, etc. [0058].

27. It would have been obvious to one of ordinary skill in the art at the invention to use an encoding device supported by a wireless network, As evidence by Kim et al., US-6,970,506 where compatible encoding devices for wireless networks are disclosed (column 6 line 13-32).

28. Regarding **claim 14**, the combination of Zhang and Suzuki as a whole teaches everything as claimed above, see claim 7. Zhang does not explicitly teach a mobile radio device comprising a video encoder in accordance with claim 7. However, Zhang discloses the network is representative of many different types of networks, including the Internet, a LAN (local area network), a WAN (wide area network), a SAN (storage area network), and wireless networks (e.g., satellite, cellular, RF, etc [0058]. It would have been obvious to one of ordinary skill in the art at the invention to use an encoding device supported by a wireless network, As evidence by Kim et al., US-6,970,506 where compatible encoding devices for wireless networks are disclosed (column 6 line 13-32).

29. Regarding **claim 15**, the combination of Zhang and Suzuki as a whole teaches everything as claimed above, see claim 8. Zhang does not explicitly teach a mobile radio device comprising a video decoder in accordance with claim 8. However, Zhang

discloses the network is representative of many different types of networks, including the Internet, a LAN (local area network), a WAN (wide area network), a SAN (storage area network), and wireless networks (e.g., satellite, cellular, RF, etc [0051]. Further taught, the network is representative of many different types of networks, including the Internet, a LAN (local area network), a WAN (wide area network), a SAN (storage area network), and wireless networks (e.g., satellite, cellular, RF, etc. [0051]. Further following decoding, the client stores the video in memory and/or plays the video via the media output device 434. The client 406 may be embodied in many different ways, including a computer, a handheld entertainment device, a set-top box, television, an Application Specific Integrated Circuits (ASIC), and so forth [0058]. It would have been obvious to one of ordinary skill in the art at the invention to use an encoding device supported by a wireless network, As evidence by Kim et al., US-6,970,506 where compatible decoding devices for wireless networks are disclosed (column 6 line 13-32).

Allowable Subject Matter

30. Claims 2, 6/2, 7/2, and 8/2 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

31. The following is a statement of reasons for the indication of allowable subject matter: The present invention as claimed relates to video transmission systems and video/encoding/decoding techniques, where the video has been compressed using a scalable compression technique for transmission over error prone networks such as

wireless and best-effort networks. The novel features include estimating a reference VOPs' identifier when an error has occurred in the reference VOPs' Identifier.

32. The prior art of record fails to anticipate or render obviousness the limitations of the claimed invention where the method for improving a quality of a scalable video object plane enhancement layer transmission over an error prone network wherein the step of recovering includes the steps of estimating a reference VOPs' identifier when an error has occurred in the reference VOPs' identifier; decoding the video object plane enhancement layer transmission until a video object plane enhancement layer header extensions is decoded; and correcting said estimated reference VOPs' identifier in response to a reference VOPs' identifier extracted from said decoded header extensions.

Conclusion

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA ROBERTS whose telephone number is (571)270-1821. The examiner can normally be reached on 7:30-5:00 EST Monday-Friday, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621
/Jessica Roberts/
Examiner, Art Unit 2621

Application/Control Number: 10/506,344
Art Unit: 2621

Page 20

06/02/2008